

ABSTRACT

5 A multiple electrode for measuring electro-
physiological characteristics of a biological specimen
includes a plurality of micro-electrode provided on a first
region on a substrate, and a reference electrode provided
in a second region on the substrate. The reference
electrode includes at least one stimulus reference
electrode for applying an electrical signal to the plurality
10 of micro-electrodes. Preferably, the reference electrode
includes at least one measurement reference electrode for
detecting an electrical signal from the plurality of
micro-electrodes, and the stimulus reference electrode is
electrically insulated from the measurement reference
15 electrode. Preferably, the second region is placed at a
distance from an outer edge of the first region, and
surrounds the first region.